

APPARATUS AND METHOD FOR PROVIDING  
SERVER STATE AND ATTRIBUTE MANAGEMENT FOR  
MULTIPLE-THREADED VOICE ENABLED WEB APPLICATIONS

ABSTRACT OF THE DISCLOSURE

A unified web-based voice messaging system provides voice application control between a web browser and an application server via an hypertext transport protocol (HTTP) connection on an Internet Protocol (IP) network. The web browser receives an HTML page from the application server having an XML element that defines data for an audio operation to be performed by an executable audio resource. The application server generates and maintains a server-side data record, also referred to as a "brownie", that includes application state information and user attribute information for multiple users within a single session controlled by a web-based browser, such as a proxy browser controlling a voice-over IP gateway. The application server, in response to receiving a new web page request from the browser, initiates a web application instance to begin a transient application session with the browser, and generates the brownie for the user of the application session. The brownie also includes a session identifier that uniquely identifies the session, and a subsession identifier that uniquely identifies each corresponding user of the application session. As each new user is added to the session, for example by initiating a call to the new user, the application server stores the subsession identifier and corresponding application state information for the new user in the same brownie. In response to receiving a second web page request from the browser that includes the session identifier, the application server initiates a new web application instance, and recovers the brownie from the memory based on the session identifier included in the second page request. Hence, the application server is able to resume processing relative to the prior application state and user attributes specified in the brownie, providing multiple independent state-full sessions for respective users associated within the same overall session.